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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/419,671	10/15/1999	MOHAMED ABDEL-MOTTALEB	PHA-23.805	1627

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
P.O. BOX 3001  
BRIARCLIFF MANOR, NY 10510

EXAMINER

STULBERGER, CAS P

ART UNIT	PAPER NUMBER
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2132

DATE MAILED: 11/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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## Office Action Summary

Application No.

09/419,671

Applicant(s)

ABDEL-MOTTALEB, MOHAMED

Examiner

Cas Stulberger

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 October 1999.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6, 9-16, 19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) 6-7, and 17-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 9-16, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This action is responsive to communications: application, filed 10/15/1999; amendment filed 07/01/2004.
2. Claims 1-6, 9-16, and 19-20 are pending in the case. Claims 6-7, and 17-18 are cancelled. Claims 1, 9, and 19 are independent claims.

### ***Response to Amendment***

3. Applicant argues that “Bhaskaran fails to disclose or suggest repeating” “the coefficient values corresponding to the signature a number of times such that each block includes a coefficient having a value corresponding to a signature digit.” Bhaskaran discloses “determining whether to embed a watermark bit in each block based on the highest frequency transform coefficient in that block.” Since this determination is done for each block, the process is repeated for all the blocks, which meets the limitation of “repeating the coefficient values corresponding to the signature a number of times such that each block includes a coefficient having a value corresponding to a signature digit.”

In view of the rejections and response to arguments above, the prior art rejections are maintained. The grounds of rejection as set forth in the previous office action is reproduced below.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,064,764 to Bhaskaran et al.

6. In regards to claims 1-20 Bhaskaran et al discloses watermark insertion is accomplished by embedding the bits of a digital signature of a hash function of the image in the frequency coefficients of the image (Bhaskaran: Abstract, second sentence, lines 4-7). The watermark is computed by partially decoding the compressed digital image to generate a plurality of blocks, with each block having a plurality of transform coefficients (Bhaskaran: column 2, lines 63-67). Then a quantizer of the highest frequency coefficient in each block is obtained and the coefficient is multiplied by the coefficient. It is then determined whether to embed a watermark bit in each block based on the highest frequency transform coefficient in that block and the number of watermark bits remaining to be embedded in the digital image. The least significant bit (LSB) of the highest frequency transform coefficient in each block for which it was determined to embed a watermark is then set to 0 (Bhaskaran: column 3, lines 1-8). This meets

the limitation of “generating a transform representation of the image.” A hash value at each block is updated by applying a hash function at each block, wherein the hash value computed at the last block is a multiple-bit value representative of the entire digital image (Bhaskaran: column 3, lines 8-12). This meets the limitation of “determining a digital signature unique to the image.” Once the hash value for the entire image is computed a watermark is computer from the computed hash value using a secret key and a digital signature algorithm. Then each watermark bit is embedded in one of the blocks which it was previously determined to do so by setting the LSB of the highest frequency transform coefficient in that block to match the corresponding watermark bit (Bhaskaran: column 3, lines 8-17). This meets the limitation of “identifying high frequency coefficients within the transform representation; and assigning values to the high frequency coefficients to correspond to the digital signature.”

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,


however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cas Stulberger whose telephone number is (703) 305-8034. The examiner can normally be reached on Monday - Friday, 9:00A.M. - 6:00P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571) 272-3810. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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